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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/012,006	12/06/2001	Shyamasundar S. Kaluve	112025-0486	2878

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EXAMINER	
BLAIR, DOUGLAS B	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/012,006	KALUVE ET AL.	
	Examiner	Art Unit	
	Douglas B. Blair	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/16/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,262,977 to Seaman et al..

3. As to claim 1, Seaman teaches an intermediate network device having a plurality of ports for forwarding network messages within a bridged network, a method for efficiently transitioning the ports among a plurality of spanning tree protocol (STP) states, the method comprising the steps of: executing the STP at the intermediate network device so as to elect a root of the bridged network and to assign one of the device's ports to a Root Port Role, one or more of the device's ports to an Alternate Port Role, and one or more of the device's ports to a Designated Port Role (col. 9, line 63-col. 10, line 5); transitioning the ports assigned to the Root Port Role and the Designated Port Role to a forwarding STP state (col. 10, lines 37-49, transitions 5 and 6); transitioning the one or more ports assigned to the Alternate Port Role to a discarding STP state (col. 10, lines 37-49, transition 4); receiving a bridge protocol data unit (BPDU) message, the BPDU message having a proposal flag that is asserted (col. 3, lines 3-23, BPDU messages are standard to any STP compliant system); and if the BPDU message was received on the port assigned the Root Port Role, leaving the one or more ports assigned to the

Designated Port Role in the forwarding STP state, provided that the one or more ports assigned to the Alternate Port Role are in the discarding STP state roles (col. 10, lines 14-49 and Fig. 5).

4. As to claim 2, Seaman teaches the method of claim 1 wherein the STP substantially complies with the Institute of Electrical and Electronics Engineers IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) specification standard (col. 3, lines 3-23).

5. As to claims 3-4, they feature the same limitations as claim 5 and are rejected for the same reason as claim 5.

6. As to claim 5, Seaman teaches the method of claim 1 further comprising the steps of: transitioning one or more ports assigned to the Designated Port Role to a discarding STP state, if the BPDU message with the asserted proposal flag is received on a port other than the port assigned to the Root Port Role (col. 5, lines 35-51); and upon transitioning the one or more ports assigned to the Designated Port Role to the discarding state, issuing a BPDU message from the port on which the BPDU message with the asserted proposal flag was received, the issued BPDU message having an agreement flag that is asserted (col. 3, lines-3-42).

7. As to claim 6, Seaman teaches the method of claim 1 further comprising the step of, if the one or more ports assigned the Alternate Port Role is not in the discarding STP state, placing such ports in the discarding STP state (col. 10, lines 37-49, transition 4).

8. As to claim 7, Seaman teaches an intermediate network device configured to forward network messages within a bridged network, the device having a plurality of ports for connecting the device to one or more network entities, the intermediate network device comprising: a port role selection state machine configured to assign roles to the ports (col. 10, lines 14-49 and Fig. 5); a port transition state machine configured to transition the ports among a plurality of

spanning tree protocol (STP) states depending on the assigned roles (col. 10, lines 14-49 and Fig. 5); and a sync manager for use in executing the STP, wherein, the port role selection state machine and the port transition state machine cooperate so as to assign one of the device's ports to a Root Port Role, to assign one or more of the device's ports to an Alternate Port Role, and to assign one or more of the device's ports to a Designated Port Role, the port role selection state machine and the port transition state machine further cooperating to transition the ports assigned to the Root Port Role and the Designated Port Role to a forwarding STP state and to transition the one or more ports assigned to the Alternate port role to a discarding STP state (col. 10, lines 14-49 and Fig. 5), and in response to receiving a bridge protocol data unit (BPDU) message having a proposal flag that is asserted, the sync manager cooperates with the port transition state machine to leave one or more of the ports assigned to the Designated Port Role in the forwarding STP state, provided that the BPDU message was received on the port assigned the Root Port Role and further provided that the one or more ports assigned to the Alternate Port Role are in a discarding STP state (col. 10, lines 14-49 and Fig. 5).

9. As to claim 8, Seaman teaches the intermediate network device of claim 7 further comprising a forwarding engine configured to forward network messages received on a first port to one or more second ports (col. 10, lines 14-49 and Fig. 5).

10. As to claim 9, Seaman teaches the intermediate network device of claim 7 wherein the STP executed by the device substantially complies with the Institute of Electrical and Electronics Engineers (IEEE) 802.1w Rapid Spanning Tree Protocol (RSTP) specification standard (col. 3, lines 3-23).

11. As to claim 10, Seaman teaches the intermediate network device of claim 7 further comprising a BPDU message generator, wherein the sync manager cooperates with the BPDU message generator to have a BPDU message issued from the port assigned to the Root Port Role, the issued BPDU message having an agreement flag that is asserted (col. 3, lines-3-42).

12. As to claim 11, Seaman teaches an intermediate network device having a plurality of ports for forwarding network messages within a bridged network, a method for efficiently transitioning the ports among a plurality of spanning tree protocol (STP) states, the method comprising the steps of: executing the STP at the intermediate network device so as to elect a root of the bridged network, to designate a port of the device to be the current root port and to assign one or more of the device's ports to a Designated Port Role (col. 10, lines 14-49 and Fig. 5); transitioning the ports assigned to the Designated Port Role to a forwarding STP State-receiving a bridge protocol data unit (BPDU) message, the BPDU message having a proposal flag that is asserted (col. 3, lines 3-42); and if the proposal-BPDU message was received on the current root port, leaving the one or more ports assigned to the Designated Port Role in the forwarding STP state (col. 10, lines 14-49 and Fig. 5).

13. As to claim 12, Seaman teaches the method of claim 11 further comprising the step of, if the proposal-BPDU message was received on a newly elected root port, identifying the current root port as a previous root port, transitioning the previous root port to a blocking STP state and leaving the one or more ports assigned to the Designated Port Role in the forwarding STP state (col. 10, lines 14-49 and Fig. 5).

14. As to claim 13, Seaman teaches the method of claim 12 further comprising the step of issuing a BPDU message from the port on which the proposal-BPDU message was received, the issued BPDU message having an agreement flag that is asserted (col. 3, lines 3-42).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair
DBB

KAMINI SHAH
PRIMARY EXAMINER